JOB HAZARD ANALYSIS (JHA)

Business name

Document: JHA-001 Rev 1
Prepared: Nov 9, 2026
Review by: Dec 9, 2026
Highest risk after controls: Medium

1. BUSINESS AND JOB DETAILS

Job	Workshop steel fabrication	**Start date**	Nov 9, 2026
Working hours	7:00 am to 3:30 pm	**Trade**	Welding and fabrication

2. JOB STEPS, HAZARDS AND CONTROLS

#	Job step	Hazards	Risk before	Controls	Risk after	Responsible
1	Move steel with a forklift or overhead crane, keeping walkways clear	Being hit by heavy equipment Crane and lifting failure Rules: 29 CFR 1926 Subpart O; 29 CFR 1926 Subpart CC	**Critical Possible / Fatality**	1.1 Separate people and equipment with barriers, exclusion zones and marked walkways. [Engineering (guarding)] 1.2 Use equipment with working backup alarms, cameras and lights. [Engineering] 1.3 Have a site traffic plan showing equipment routes, loading areas and pedestrian paths. [Administrative] 1.4 Use a spotter when backing up or working near people. [Administrative] 1.5 Make eye contact with the operator before going near. Stay out of the swing radius. [Administrative] 1.6 Operators are trained and authorized for each machine. Forklift and telehandler operators are trained, evaluated and certified by the employer (29 CFR 1910.178(l), via 1926.602(d)). [Administrative] 1.7 Do a pre-start check on each machine every day and record it. [Administrative] 1.8 Wear hi-vis clothing and a hard hat. [PPE] 1.9 Barricade the lift zone and keep everyone out from under the load. [Engineering (guarding)] 1.10 Use a crane rated for the load at the radius, set up on firm ground with outrigger pads. [Engineering] 1.11 Check slings, chains, shackles and hooks before use. Remove anything damaged or not tagged. [Engineering] 1.12 Plan the lift: weight, radius, ground, path and landing area. Use a written lift plan for complex lifts. [Administrative] 1.13 Use a certified crane operator who has also been evaluated by the employer, with the evaluation documented on site (29 CFR 1926.1427), plus a qualified rigger (1926.1425) and a qualified signal person (1926.1428). [Administrative] 1.14 Use tag lines to control loads and agree on clear radio or hand signals. [Administrative] 1.15 Stop lifting in high wind or when the operator cannot see the signal person. [Administrative] 1.16 Never ride on a load or hook. [Administrative]	**Medium Rare / Fatality**	Site supervisor

#	Job step	Hazards	Risk before	Controls	Risk after	Responsible
				1.17 Wear a hard hat, hi-vis, gloves and safety boots. [PPE]		
2	Cut and drill steel with guards in place	Saw cuts and kickback Angle grinder injuries Loud noise Rules: 29 CFR 1926 Subpart I; 29 CFR 1926.52	**High Possible / Serious injury**	2.1 Keep blade guards fitted and working, and use the riving knife on table saws. [Engineering] 2.2 Use push sticks and clamps, and support long pieces so they do not pinch the blade. [Engineering] 2.3 Use a sharp, undamaged blade made for the material. [Administrative] 2.4 Stand to one side of the blade line, out of the kickback path. [Administrative] 2.5 Let the blade stop fully before reaching in or putting the saw down. [Administrative] 2.6 Use a guarded saw or a different tool where you can. [Substitution] 2.7 Keep the guard on and use the side handle. Never remove the guard. [Engineering] 2.8 Use the right disc for the job, rated for the grinder's speed. Check it for cracks first. [Administrative] 2.9 Only trained people change discs, with the grinder unplugged or the battery out. [Administrative] 2.10 Keep both hands on the grinder and let the disc stop before putting it down. [Administrative] 2.11 Use quieter tools and methods, such as cut-to-size materials, low-noise machines and battery tools. [Substitution] 2.12 Keep noisy plant away from work areas, and use screens or distance between the noise and people. [Engineering (guarding)] 2.13 Keep tools maintained and use mufflers on compressors and generators. [Engineering] 2.14 Limit time on noisy tools and rotate workers. [Administrative] 2.15 If you have to shout to be heard at arm's length, wear hearing protection. [Administrative]	**Medium Unlikely / Serious injury**	Site supervisor
3	Weld in a booth with extraction	Welding and cutting fumes Eye injuries Fire from hot works Rules: 29 CFR 1926 Subpart J; 29 CFR 1926.352 and NFPA 51B (35 ft rule also in 1910.252(a))	**Critical Likely / Serious injury**	3.1 Remove paint, galvanizing and coatings from the weld area first, or use a process that makes less fume. [Substitution] 3.2 Use fume extraction (local exhaust ventilation) close to the weld. [Engineering] 3.3 Weld outdoors or in a well-ventilated area, and keep your head out of the fume plume. [Engineering] 3.4 Never weld or cut in a confined space without testing the air and using forced ventilation. [Administrative] 3.5 Wear a powered air respirator or fitted respirator when extraction is not enough. [PPE] 3.6 Use tool guards and screens to stop flying particles. [Engineering] 3.7 Use dust extraction and water to keep dust out of the air. [Engineering]	**Medium Unlikely / Serious injury**	Site supervisor

#	Job step	Hazards	Risk before	Controls	Risk after	Responsible
				3.8 Keep others out of the area when cutting, grinding or chipping. [Administrative] 3.9 Keep an eye wash station or eye wash bottles on site. [Administrative] 3.10 Wear safety glasses at all times, goggles for dust and chemicals, and a face shield for grinding. [PPE] 3.11 Use cold work methods where you can, such as bolting, press fittings or cutting with a saw instead of a torch. [Elimination] 3.12 Move anything that can burn at least 35 feet away, or cover it with fire blankets. [Engineering (guarding)] 3.13 Use fire-resistant screens to stop sparks reaching people or gaps in walls and floors. [Engineering] 3.14 Get a hot work permit before starting. [Administrative] 3.15 Keep a charged fire extinguisher and fire blanket at the work spot. [Administrative]		
4	Handle hot and sharp parts with gloves	Burns from hot surfaces Cuts from sharp edges	**Medium Likely / Minor injury**	4.1 Isolate heating systems and let parts cool before you touch them. [Elimination] 4.2 Fit guards or insulation on hot pipes and equipment. [Engineering] 4.3 Mark hot items with chalk or a "HOT" sign so others know. [Administrative] 4.4 Keep a first aid kit and cool running water nearby for burns. [Administrative] 4.5 Wear heat-resistant gloves and long sleeves. [PPE] 4.6 Deburr or cover sharp edges, and fit edge protectors on exposed sheet metal. [Engineering] 4.7 Use knives with retractable or self-retracting blades. [Engineering] 4.8 Cut away from your body and keep your other hand clear. [Administrative] 4.9 Put used blades in a blade bin or sharps container. [Administrative] 4.10 Use two people to handle large sheets of metal or glass. [Administrative] 4.11 Wear cut-resistant gloves and long sleeves. [PPE]	**Low Unlikely / Minor injury**	Site supervisor
5	Store gas bottles upright and chained	Flammable liquids and gases Compressed air Rules: 29 CFR 1926.152	**High Unlikely / Fatality**	5.1 Use non-flammable or water-based products where you can. [Substitution] 5.2 Keep ignition sources away: no smoking, no hot work and no running engines near flammables. [Engineering (guarding)] 5.3 Store fuels and solvents in approved, closed containers in a ventilated area away from the work. [Engineering] 5.4 Refuel equipment outdoors with the engine off and cool. [Administrative] 5.5 Keep only what you need for the day on site. [Administrative] 5.6 Store gas cylinders upright, secured and outdoors.	**Medium Rare / Fatality**	Site supervisor

#	Job step	Hazards	Risk before	Controls	Risk after	Responsible
				[Administrative] 5.7 Keep a suitable fire extinguisher where flammables are used or stored. [Administrative] 5.8 Wear chemical gloves and safety glasses when pouring or mixing. [PPE] 5.9 Fit whip checks (safety cables) on hose joints and check hoses before use. [Engineering] 5.10 Fit a pressure regulator and keep pressure to the tool's rating. [Engineering] 5.11 Turn off and bleed the line before disconnecting. [Administrative] 5.12 Never point air at anyone or use it on clothes or skin. Air for cleaning must be under 30 psi with chip guarding (29 CFR 1926.302(b)(4)). [Administrative] 5.13 Wear safety glasses and hearing protection. [PPE]		
6	Sweep up slag and offcuts	Poor housekeeping and waste	**Medium Likely / Minor injury**	6.1 Order materials to size and send packaging back where you can. [Elimination] 6.2 Put dumpsters and waste chutes close to the work. [Engineering] 6.3 Clean as you go, and do a full clean up at the end of each day. [Administrative] 6.4 Keep exits, stairs and walkways clear at all times. [Administrative] 6.5 Stack materials neatly on level ground, away from edges. [Administrative] 6.6 Wear gloves when handling waste. [PPE]	**Low Unlikely / Minor injury**	Site supervisor

Risk key: risk = likelihood x consequence on a 5 x 5 matrix. Low, Medium, High, Critical. Work must not start while the risk after controls is high or above. Controls are listed in order of the hierarchy of controls: Elimination, Substitution, Engineering (guarding), Engineering, Administrative, PPE.

3. PPE AND PERMITS

Required PPE	Permits and plans
Welding helmet (ANSI Z87.1) Welding gloves Safety-toe boots (ASTM F2413) Safety glasses (ANSI Z87.1) Hearing protection (earmuffs or plugs) Coveralls High-visibility safety apparel, ANSI/ISEA 107 Class 2 or 3 (Type R near roadways) Hard hat (ANSI Z89.1) Work gloves N95 respirator Face shield (ANSI Z87.1) Cut-resistant gloves Half-face respirator (P100 cartridges) Safety goggles (ANSI Z87.1)	Critical lift plan Hot work permit (fire watch at least 60 minutes after, NFPA 51B)

4. PLANT AND EQUIPMENT

Plant / equipment	License or training needed	Inspection needed	Rego / ID	Last inspected	Certificate / report
Welding machine					
Angle grinder		Visual check of cord, plug and guards before each day's use; if you run an assured equipment grounding program instead of GFCIs, test every 3 months (29 CFR 1926.404(b)(1))			
Oxy-acetylene torch					
Forklift	Trained and evaluated operator, certified by the employer with name, training date, evaluation date and evaluator; re-evaluated every 3 years (29 CFR 1910.178(l), via 1926.602(d))	Examined before use at least daily, and after each shift where used round the clock (29 CFR 1910.178(q)(7))			
Mobile crane	Operator certified by an accredited body or audited employer program (29 CFR 1926.1427) and evaluated by the employer, with a signed evaluation on site (1926.1427(f)); qualified rigger (1926.1425) and qualified signal person (1926.1428)	Shift inspection by a competent person (29 CFR 1926.1412(d)), documented monthly inspection (1926.1412(e)) and annual inspection by a qualified person (1926.1412(f))			

5. TRAINING REQUIRED FOR THIS WORK

- Equipment operator training (29 CFR 1926.20(b)(4)); forklift and telehandler operators trained, evaluated and certified, re-evaluated every 3 years (29 CFR 1910.178(l))
- Crane operator certification plus documented employer evaluation (29 CFR 1926.1427); qualified rigger (1926.1425); qualified signal person (1926.1428)

6. CREW TRAINING AND CERTIFICATIONS

Crew listed at sign-on below, with ticket and licence numbers.

7. EMERGENCY ARRANGEMENTS

Emergency number	911	**First aid kit**	In the work vehicle
Fire extinguisher	In the work vehicle	**Alarm and evacuation**	Shout for help and stop work. Make the area safe and go to the assembly point. Call the emergency number and send someone to meet the ambulance.
Reporting incidents	Report a fatality to OSHA within 8 hours, and an in-patient hospitalization, amputation or eye loss within 24 hours.		

8. MONITORING, REVIEW AND LEGAL BASIS

A competent person inspects the job site, materials and equipment before work each day and as conditions change (29 CFR 1926.20(b)(2)). Any time this JHA is revised, the affected crew is re-briefed and signs again.

Legal basis: OSH Act Section 5(a)(1) and 29 CFR 1926, Safety and Health Regulations for Construction (incl. 1926.20 and 1926.21). OSHA requires employers to find and fix hazards and to train workers on them. A JHA breaks the job into steps, lists the hazards in each step and the controls that protect the crew. General contractors often require one before you

start.

Keep this JHA on site during the job, and keep it with the training and inspection records for at least 1 year after the job (longer if your state plan or general contractor requires it). OSHA does not set a retention period for JHAs themselves.

9. REVISION HISTORY

Rev	Date	By	What changed
1	Nov 9, 2026		First issue

10. SIGN-OFF

	Name	Signature	Date	
Prepared by				
Supervisor				
General contractor review				Accepted for use: Yes / No

By signing below, each crew member confirms they were trained on the hazards and controls in this JHA before work started, and will follow it. Stop work and tell the supervisor if conditions change.

Name	Role / company	Tickets / licences	Signature	Date

Name	Role / company	Tickets / licences	Signature	Date